

**METHODS OF FABRICATING READ ONLY MEMORY DEVICES
INCLUDING THERMALLY OXIDIZED TRANSISTOR SIDEWALLS, AND
DEVICES SO FABRICATED**

Abstract of the Disclosure

A ROM device is fabricated by forming a first conductive layer pattern including a sidewall, on an insulating layer on an integrated circuit substrate. Ions are implanted into the integrated circuit substrate using the first conductive layer pattern as an implantation mask. At least a portion of the integrated circuit substrate, and at least a portion of the sidewall are thermally oxidized, to form a thermal oxide layer on at least a portion of the integrated circuit substrate and on the sidewall, and to form a buried doping layer from the implanted ions beneath the thermal oxide layer. A second conductive layer pattern is then formed on at least a portion of the thermal oxide layer and on at least a portion of the first conductive layer pattern.